



SEQUENCE LISTING

<110> WEI, Ming-Hui et al

<120> ISOLATED HUMAN PHOSPHATASE PROTEINS,
NUCLEIC ACID MOLECULES ENCODING HUMAN PHOSPHATASE PROTEINS,
AND USES THEREOF

<130> CL000964-CIP

<140> 09/761,640

<141> 2001-01-18

<160> 10

<170> FastSEQ for Windows Version 4.0

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<211> 2704

<212> DNA

<213> Human

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50 55 60
Thr Glu Lys Ala Pro Ser Glu Glu Leu His Gly Asp Gln Thr Asp
65 70 75 80
Phe Gly Gln Gly Ser Gln Ser Pro Gln Lys Gln Glu Glu Gln Arg Gln
85 90 95
His Leu His Leu Met Val Gln Leu Leu Arg Pro Gln Asp Asp Ile Arg
100 105 110
Leu Ala Ala Gln Leu Glu Ala Pro Arg Pro Pro Arg Leu Arg Tyr Leu
115 120 125
Leu Val Val Ser Thr Arg Glu Gly Glu Gly Leu Ser Gln Asp Glu Thr
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Val Leu Leu Gly Val Asp Phe Pro Asp Ser Ser Ser Pro Ser Cys Thr
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Leu Gly Leu Val Leu Pro Leu Trp Ser Asp Thr Gln Val Tyr Leu Asp
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Gly Asp Gly Gly Phe Ser Val Thr Ser Gly Gly Gln Ser Arg Ile Phe
180 185 190
Lys Pro Ile Ser Ile Gln Thr Met Trp Ala Thr Leu Gln Val Leu His
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Gln Ala Cys Glu Ala Ala Leu Gly Ser Gly Leu Val Pro Gly Gly Ser
210 215 220
Ala Leu Thr Trp Ala Ser His Tyr Gln Glu Arg Leu Asn Ser Glu Gln
225 230 235 240
Ser Cys Leu Asn Glu Trp Thr Ala Met Ala Asp Leu Glu Ser Leu Arg
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Pro Pro Ser Ala Glu Pro Gly Gly Ser Ser Glu Gln Glu Gln Met Glu
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Glu Ser Val Thr Ser Lys Glu Ile Arg Gln Ala Leu Glu Leu Arg Leu
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Gly Leu Pro Leu Gln Gln Tyr Arg Asp Phe Ile Asp Asn Gln Met Leu
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Leu Leu Val Ala Gln Arg Asp Arg Ala Ser Arg Ile Phe Pro His Leu
325 330 335
Tyr Leu Gly Ser Glu Trp Asn Ala Ala Asn Leu Glu Glu Leu Gln Arg
340 345 350
Asn Arg Val Thr His Ile Leu Asn Met Ala Arg Glu Ile Asp Asn Phe
355 360 365

Tyr Pro Glu Arg Phe Thr Tyr His Asn Val Arg Leu Trp Asp Glu Glu
 370 375 380
 Ser Ala Gln Leu Leu Pro His Trp Lys Glu Thr His Arg Phe Ile Glu
 385 390 395 400
 Ala Ala Arg Ala Gln Gly Thr His Val Leu Val His Cys Lys Met Gly
 405 410 415
 Val Ser Arg Ser Ala Ala Thr Val Leu Ala Tyr Ala Met Lys Gln Tyr
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 Glu Cys Ser Leu Glu Gln Ala Leu Arg His Val Gln Glu Leu Arg Pro
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 Phe Gly Gln Gly Ser Gln Ser Pro Gln Lys Gln Glu Glu Gln Arg Gln
 85 90 95
 His Leu His Leu Met Val Gln Leu Leu Arg Pro Gln Asp Asp Ile Arg
 100 105 110
 Leu Ala Ala Gln Leu Glu Ala Pro Arg Pro Pro Arg Leu Arg Tyr Leu
 115 120 125
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 Val Leu Leu Gly Val Asp Phe Pro Asp Ser Ser Ser Pro Ser Cys Thr
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 Leu Gly Leu Val Leu Pro Leu Trp Ser Asp Thr Gln Val Tyr Leu Asp
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 Gly Asp Gly Gly Phe Ser Val Thr Ser Gly Gly Gln Ser Arg Ile Phe
 180 185 190
 Lys Pro Ile Ser Ile Gln Thr Met Trp Ala Thr Leu Gln Val Leu His
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 Gln Ala Cys Glu Ala Ala Leu Gly Ser Gly Leu Val Pro Gly Gly Ser
 210 215 220
 Ala Leu Thr Trp Ala Ser His Tyr Gln Glu Arg Leu Asn Ser Glu Gln
 225 230 235 240
 Ser Cys Leu Asn Glu Trp Thr Ala Met Ala Asp Leu Glu Ser Leu Arg
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Leu Leu Val Ala Gln Arg	Asp Arg Ala Ser Arg	Ile Phe Pro His Leu
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Tyr Leu Gly Ser Glu Trp Asn Ala	Ala Asn Leu Glu Glu	Leu Gln Arg
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Tyr Pro Glu Arg Phe Thr	Tyr His Asn Val Arg	Leu Trp Asp Glu Glu
370	375	380
Ser Ala Gln Leu Leu Pro	His Trp Lys Glu Thr	His Arg Phe Ile Glu
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Ala Ala Arg Ala Gln Gly	Thr His Val Leu Val	His Cys Lys Met Gly
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Val Ser Arg Ser Ala Ala	Thr Val Leu Ala Tyr	Ala Met Lys Gln Tyr
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Glu Cys Ser Leu Glu Gln	Ala Leu Arg His Val	Gln Glu Leu Arg Pro
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Ile Ala Arg Pro Asn Pro	Gly Phe Leu Arg Gln	Leu Gln Ile Tyr Gln
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Gly Ile Leu Thr Ala Ser	Arg Gln Ser His Val	Trp Glu Gln Lys Val
465	470	475
Gly Gly Val Ser Pro	Glu Glu His Pro Ala	Pro Glu Val Ser Thr Pro
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Phe Pro Leu Leu Pro	Pro Glu Gly Gly	Glu Glu Lys Val
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Val Gly Met Glu Glu Ser	Gln Ala Ala Pro Lys	Glu Glu Pro Gly Pro
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Arg Pro Arg Ile Asn Leu	Arg Gly Val Met Arg	Ser Ile Ser Leu Leu
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Glu Pro Ser Leu Glu Leu	Glu Ser Thr Ser	Glu Thr Ser Asp Met Pro
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Glu Val Phe Ser Ser His	Glu Ser Ser His	Glu Pro Leu Gln Pro
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Pro Gln Pro Ala Leu Lys	Ser Arg Gln Ser Val	Val Thr Leu Gln Gly
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Ser Ala Val Val Ala Asn	Arg Thr Gln Ala Phe	Gln Glu Gln Glu Gln
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Gln Asp Gly Gly Asp Asn Asp Asp Ala Ala Glu Ala Ser Ser Glu Pro
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Thr Glu Lys Ala Pro Ser Glu Glu Leu His Gly Asp Gln Thr Asp
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Phe Gly Gln Gly Ser Gln Ser Pro Gln Lys Gln Glu Glu Gln Arg Gln
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His Leu His Leu Met Val Gln Leu Leu Arg Pro Gln Asp Asp Ile Arg
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Glu Gln Ala Ile Arg Ala Glu Leu Trp Lys Val Leu Asp Val Ser Asp
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gagatgtct tcttttgc tttctggcc tctggctagt cagttttca tagccttaca 2640
gtatctggct ttgtactgag aaataaaaca cattttcata aaaaaaaaaa aaaaaaaaaa 2700
aaaa 2704

<210> 8

<211> 312

<212> PRT

<213> Human

<400> 8

Met Ala Leu Val Thr Val Ser Arg Ser Pro Pro Gly Ser Gly Ala Ser

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Thr Pro Val Gly Pro Trp Asp Gln Ala Val Gln Arg Arg Ser Arg Leu			
20	25	30	
Gln Arg Arg Gln Ser Phe Ala Val Leu Arg Gly Ala Val Leu Gly Leu			
35	40	45	
Gln Asp Gly Gly Asp Asn Asp Asp Ala Ala Glu Ala Ser Ser Glu Pro			
50	55	60	
Thr Glu Lys Ala Pro Ser Glu Glu Leu His Gly Asp Gln Thr Asp			
65	70	75	80
Phe Gly Gln Gly Ser Gln Ser Pro Gln Lys Gln Glu Glu Gln Arg Gln			
85	90	95	
His Leu His Leu Met Val Gln Leu Leu Arg Pro Gln Asp Asp Ile Arg			
100	105	110	
Leu Ala Ala Gln Leu Glu Ala Pro Arg Pro Pro Arg Leu Arg Tyr Leu			
115	120	125	
Leu Val Val Ser Thr Arg Glu Gly Glu Gly Leu Ser Gln Asp Glu Thr			
130	135	140	
Val Leu Leu Gly Val Asp Phe Pro Asp Ser Ser Ser Pro Ser Cys Thr			
145	150	155	160
Leu Gly Leu Val Leu Pro Leu Trp Ser Asp Thr Gln Val Tyr Leu Asp			
165	170	175	
Gly Asp Gly Gly Phe Ser Val Thr Ser Gly Gly Gln Ser Arg Ile Phe			
180	185	190	
Lys Pro Ile Ser Ile Gln Thr Met Trp Ala Thr Leu Gln Val Leu His			
195	200	205	
Gln Ala Cys Glu Ala Ala Leu Gly Ser Gly Leu Val Pro Gly Gly Ser			
210	215	220	
Ala Leu Thr Trp Ala Ser His Tyr Gln Glu Arg Leu Asn Ser Glu Gln			
225	230	235	240
Ser Cys Leu Asn Glu Trp Thr Ala Met Ala Asp Leu Glu Ser Leu Arg			
245	250	255	
Pro Pro Ser Ala Glu Pro Gly Gly Ser Ser Glu Gln Glu Gln Met Glu			
260	265	270	
Gln Ala Ile Arg Ala Glu Leu Trp Lys Val Leu Glu Leu Glu Ser Thr			
275	280	285	
Ser Glu Thr Ser Asp Met Pro Glu Val Phe Ser Ser His Glu Ser Ser			
290	295	300	
His Glu Glu Pro Leu Gln Pro Phe			
305	310		

<210> 9
 <211> 524
 <212> PRT
 <213> Drosophila melanogaster

1	5	10	15
Met Ala Leu Val Thr Val Gln Arg Ser Pro Ser Val Ala Gly Ser Cys			
Ser Asn Ser Asp Gly Glu Ser Glu Asp Asp Glu Gly Asn Ser Lys Gly			
20	25	30	
Asn Asp Arg Ser Glu Cys Phe Phe Ala Gly Lys Gly Thr Ala Leu Val			
35	40	45	
Leu Ala Leu Lys Asp Ile Pro Pro Leu Thr Gln Ser Glu Arg Arg Leu			
50	55	60	
Ser Thr Asp Ser Thr Arg Ser Ser Asn Ser Thr Gln Ser Asn Asn Ser			
65	70	75	80

Asp Ile Gln Leu Gln Ser Met Phe Tyr Leu Leu Gln Arg Glu
 85 90 95
 Asp Thr Leu Lys Met Ala Val Lys Leu Glu Ser Gln Arg Ser Asn Arg
 100 105 110
 Thr Arg Tyr Leu Val Ile Ala Ser Arg Ser Cys Cys Arg Ser Gly Thr
 115 120 125
 Ser Asp Arg Arg Arg His Arg Ile Met Arg His His Ser Val Lys Val
 130 135 140
 Gly Gly Ser Ala Gly Thr Lys Ser Ser Thr Ser Pro Ala Val Pro Thr
 145 150 155 160
 Gln Arg Gln Leu Ser Val Glu Gln Thr Ala Thr Glu Ala Ser Ser Lys
 165 170 175
 Cys Asp Lys Thr Ala Asp Lys Glu Asn Ala Thr Ala Ala Gly Asp Asn
 180 185 190
 Lys Asn Thr Ser Gly Met Glu Glu Ser Cys Leu Leu Gly Ile Asp Cys
 195 200 205
 Asn Glu Arg Thr Thr Ile Gly Leu Val Val Pro Ile Leu Ala Asp Thr
 210 215 220
 Thr Ile His Leu Asp Gly Asp Gly Gly Phe Ser Val Lys Val Tyr Glu
 225 230 235 240
 Lys Thr His Ile Phe Lys Pro Val Ser Val Gln Ala Met Trp Ser Ala
 245 250 255
 Leu Gln Thr Leu His Lys Val Ser Lys Lys Ala Arg Glu Asn Asn Phe
 260 265 270
 Tyr Ala Ser Gly Pro Ser His Asp Trp Leu Ser Ser Tyr Glu Arg Arg
 275 280 285
 Ile Glu Ser Asp Gln Ser Cys Leu Asn Glu Trp Asn Ala Met Asp Ala
 290 295 300
 Leu Glu Ser Arg Arg Pro Pro Ser Pro Asp Ala Ile Arg Asn Lys Pro
 305 310 315 320
 Pro Glu Lys Glu Glu Thr Glu Ser Val Ile Lys Met Lys Leu Lys Ala
 325 330 335
 Ile Met Met Ser Val Asp Leu Asp Glu Val Thr Ser Lys Tyr Ile Arg
 340 345 350
 Gly Arg Leu Glu Glu Ile Leu Asp Met Asp Leu Gly Glu Tyr Lys Ser
 355 360 365
 Phe Ile Asp Ala Glu Met Leu Val Ile Leu Gly Gln Met Asp Ala Pro
 370 375 380
 Thr Lys Ile Phe Glu His Val Tyr Leu Gly Ser Glu Trp Asn Ala Ser
 385 390 395 400
 Asn Leu Glu Glu Leu Gln Lys Asn Gly Val Arg His Ile Leu Asn Val
 405 410 415
 Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Thr Phe Glu Tyr Phe Asn
 420 425 430
 Val Arg Val Tyr Asp Asp Glu Lys Thr Asn Leu Leu Lys Tyr Trp Asp
 435 440 445
 Asp Thr Phe Arg Tyr Ile Thr Arg Ala Lys Ala Glu Gly Ser Lys Val
 450 455 460
 Leu Val His Cys Lys Met Gly Val Ser Arg Ser Ala Ser Val Val Ile
 465 470 475 480
 Ala Tyr Ala Met Lys Ala Tyr Gln Trp Glu Phe Gln Ala Leu Glu
 485 490 495
 His Val Lys Lys Arg Arg Ser Cys Ile Lys Pro Asn Lys Asn Phe Leu
 500 505 510
 Asn Gln Leu Glu Thr Tyr Ser Gly Met Leu Asp Ala
 515 520

<210> 10
<211> 111
<212> PRT
<213> Human

<400> 10
Met Ala Arg Glu Ile Asp Asn Phe Tyr Pro Glu Arg Phe Thr Tyr His
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Asn Val Arg Leu Trp Asp Glu Glu Ser Ala Gln Leu Leu Pro His Trp
20 25 30
Lys Glu Thr His Arg Phe Ile Glu Ala Ala Arg Ala Gln Gly Thr His
35 40 45
Val Leu Val His Cys Lys Met Gly Val Ser Arg Ser Ala Ala Thr Val
50 55 60
Leu Ala Tyr Ala Met Lys Gln Tyr Glu Cys Ser Leu Glu Gln Ala Leu
65 70 75 80
Arg His Val Gln Glu Leu Arg Pro Ile Ala Arg Pro Asn Pro Gly Phe
85 90 95
Leu Arg Gln Leu Gln Ile Tyr Gln Gly Ile Leu Thr Ala Arg Thr
100 105 110